

IN THE CLAIMS

Please cancel without prejudice Claims 1-17, 26-36, and 44-45, as these claims were non-elected in a restriction requirement.

✓
Please amend Claim 18 as follows:

18. (Twice Amended) A process of preparing a dehydrated composition comprising:

D²
providing platelets selected from a mammalian species, the platelets being effectively loaded by fluid phase endocytosis with an oligosaccharide therein to preserve biological properties, wherein the loading includes incubating the platelets at a temperature from about 30°C to less than about 40°C with an oligosaccharide solution, the solution having up to about 50 mM oligosaccharide therein, the incubating sufficient to load oligosaccharide inside the platelets in an amount from about 10 mM to about 50 mM;

cooling the loaded platelets to below their freezing point; and

D²
cont

lyophilizing the cooled platelets.

Please amend Claim 37 as follows:

37. (Once Amended) A process for preparing a dehydrated composition comprising:

D³

loading internally by fluid phase endocytosis platelets with from about 10 mM to about 50 mM oligosaccharide to produce internally loaded platelets; cooling the internally loaded platelets to below their freezing point; and lyophilizing the cooled internally loaded platelets.

Please amend Claim 48 as follows:

48. (Once Amended) A process for preparing a dehydrated composition comprising:

D⁴

loading internally by fluid phase endocytosis platelets with a protectorate to produce internally loaded platelets; preventing the internally loaded platelets from activating; cooling the internally loaded platelets to below their freezing point; and lyophilizing the cooled internally loaded platelets.

✓
Please add the following claims:

52. The process of Claim 18 wherein said loading with an oligosaccharide includes increasing a loading efficiency of the oligosaccharide into the platelets by maintaining a concentration of the oligosaccharide in the oligosaccharide solution at less than about 50 mM.

53. The process of Claim 18 wherein said loading with an oligosaccharide includes loading with a loading efficiency ranging from about 45% to about 50 % for the oligosaccharide solution having an oligosaccharide concentration ranging from about 20 mM to about 30 mM.

54. The process of Claim 18 wherein said oligosaccharide comprises trehalose.

55. The process of Claim 52 wherein said oligosaccharide comprises trehalose.

56. The process of Claim 53 wherein said oligosaccharide comprises trehalose.

57. The process of Claim 18 wherein said loading with an oligosaccharide includes decreasing a loading efficiency of the oligosaccharide into the platelets by providing a concentration of the oligosaccharide in the oligosaccharide solution at greater than about 50 mM.

58. The process of Claim 57 herein said oligosaccharide comprises trehalose.

59. The process of Claim 18 wherein said loading is without a fixative.

60. The process of Claim 18 additionally comprising prehydrating the lyophilized cooled platelets.

61. The process of Claim 60 wherein said prehydrating comprises exposing the lyophilized cooled platelets to moisture saturated air.

62. The process of Claim 18 additionally comprising prehydrating the lyophilized cooled platelets until the water content of the lyophilized cooled platelets ranges from about 35 % by weight to about 50 % by weight.

63. The process of Claim 60 additionally comprising rehydrating the prehydrated lyophilized cooled platelets.

64. A process for preparing a dehydrated composition comprising:

disposing platelets in an oligosaccharide solution for loading an oligosaccharide from the oligosaccharide solution into the platelets;

preventing a decrease in a loading efficiency gradient in the loading of the oligosaccharide into the platelets; and

lyophilizing the platelets.

65. The process of Claim 64 wherein said preventing a decrease in a loading efficiency gradient in the loading of the oligosaccharide into the platelets comprises maintaining a concentration of the oligosaccharide in the oligosaccharide solution below about 50 mM.

66. The process of Claim 64 wherein said loading comprises loading by fluid phase endocytosis.

67. The process of Claim 65 wherein said loading comprises loading by fluid phase endocytosis.

68. The process of Claim 64 wherein said loading with an oligosaccharide includes loading with a loading efficiency ranging from about 45% to about 50 % for the oligosaccharide solution having an oligosaccharide concentration ranging from about 20 mM to about 30 mM.

69. The process of Claim 66 wherein said loading with an oligosaccharide includes loading with a loading efficiency ranging from about 45% to about 50% for the oligosaccharide solution having an oligosaccharide concentration ranging from about 20 mM to about 30 mM.

70. The process of Claim 64 wherein said oligosaccharide comprises trehalose.

71. The process of Claim 67 wherein said oligosaccharide comprises trehalose.

72. The process of Claim 64 wherein said loading is without a fixative.

73. The process of Claim 64 additionally comprising prehydrating the lyophilized platelets.

74. The process of Claim 73 wherein said prehydrating comprises exposing the lyophilized platelets to moisture saturated air.

75. The process of Claim 64 additionally comprising prehydrating the lyophilized platelets until the water content of the lyophilized platelets ranges from about 35 % by weight to about 50 % by weight.

76. The process of Claim 73 additionally comprising rehydrating the prehydrated lyophilized platelets.

77. The process of Claim 64 wherein said preventing a decrease in a loading efficiency gradient in the loading of the oligosaccharide into the platelets comprises maintaining a positive gradient of loading efficiency to concentration of the oligosaccharide in the oligosaccharide solution.

78. The process of Claim 64 wherein said preventing a decrease in a loading efficiency gradient in the loading of the oligosaccharide into the platelets comprises maintaining a positive gradient of loading efficiency (%) to concentration (mM) of the oligosaccharide in the oligosaccharide solution.

79. The process of Claim 77 wherein said oligosaccharide comprises trehalose.

80. The process of Claim 78 wherein said oligosaccharide comprises trehalose.

81. A process for preparing a dehydrated composition comprising:

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cont.
disposing platelets in an oligosaccharide solution for loading an oligosaccharide from the oligosaccharide solution into the platelets;

preventing a decrease in a loading gradient in the loading of the oligosaccharide into the platelets; and

lyophilizing the platelets.

82. The process of Claim 81 wherein said preventing a decrease in a loading gradient in the loading of the oligosaccharide into the platelets comprises maintaining a concentration of the oligosaccharide in the oligosaccharide solution below about 50 mM.

83. The process of Claim 81 wherein said loading comprises loading by fluid phase endocytosis.

84. The process of Claim 82 wherein said loading comprises loading by fluid phase endocytosis.

85. The process of Claim 81 wherein said loading with an oligosaccharide includes loading with a loading efficiency

ranging from about 45% to about 50 % for the oligosaccharide solution having an oligosaccharide concentration ranging from about 20 mM to about 30 mM.

86. The process of Claim 83 wherein said loading with an oligosaccharide includes loading with a loading efficiency ranging from about 45% to about 50% for the oligosaccharide solution having an oligosaccharide concentration ranging from about 20 mM to about 30 mM.

87. The process of Claim 81 wherein said oligosaccharide comprises trehalose.

88. The process of Claim 84 wherein said oligosaccharide comprises trehalose.

89. The process of Claim 81 wherein said loading is without a fixative.

90. The process of Claim 81 additionally comprising prehydrating the lyophilized platelets.

91. The process of Claim 90 wherein said prehydrating comprises exposing the lyophilized platelets to moisture saturated air.

92. The process of Claim 81 additionally comprising prehydrating the lyophilized platelets until the water content of the lyophilized platelets ranges from about 35 % by weight to about 50 % by weight.

93. The process of Claim 90 additionally comprising rehydrating the prehydrated lyophilized platelets.

94. The process of Claim 81 wherein said preventing a decrease in a loading gradient in the loading of the oligosaccharide into the platelets comprises maintaining a positive gradient of concentration of oligosaccharide loaded into the platelets to concentration of the oligosaccharide in the oligosaccharide solution.

95. The process of Claim 94 wherein said oligosaccharide comprises trehalose.

96. The process of Claim 37 wherein said loading with an oligosaccharide includes increasing a loading efficiency of the oligosaccharide into the platelets by maintaining a concentration of the oligosaccharide in the oligosaccharide solution at less than about 50 mM.

97. The process of Claim 37 wherein said loading with an oligosaccharide includes loading with a loading efficiency ranging from about 45% to about 50 % for the oligosaccharide solution having an oligosaccharide concentration ranging from about 20 mM to about 30 mM.

98. The process of Claim 37 wherein said oligosaccharide comprises trehalose.

99. The process of Claim 96 wherein said oligosaccharide comprises trehalose.

100. The process of Claim 97 wherein said oligosaccharide comprises trehalose.

101. The process of Claim 37 wherein said loading with an oligosaccharide includes decreasing a loading efficiency of the oligosaccharide into the platelets by providing a concentration of the oligosaccharide in the oligosaccharide solution at greater than about 50 mM.

102. The process of Claim 101 herein said oligosaccharide comprises trehalose.

103. The process of Claim 37 wherein said loading is without a fixative.

104. The process of Claim 37 additionally comprising prehydrating the lyophilized cooled platelets.

105. The process of Claim 104 wherein said prehydrating comprises exposing the lyophilized cooled platelets to moisture saturated air.

106. The process of Claim 37 additionally comprising prehydrating the lyophilized cooled platelets until the water content of the lyophilized cooled platelets ranges from about 35 % by weight to about 50 % by weight.

107. The process of Claim 104 additionally comprising rehydrating the prehydrated lyophilized cooled platelets.
